REMARKS

Claims 1-12 are pending and stand rejected.

The Office Action rejected claims 1 and 10 under 35 USC 101 arguing that the phrase "clustering the string with a cluster associated with a n-gram, otherwise: do nothing" (a) is directed to an abstract idea not tied to a technological art, environment or machine that would result in a practical application producing a useful result to form the basis of statutory subject matter, and (b) does not produce a tangible result. Office Action, pgs. 3-4. Applicant contends that the Office Action has not made a prima facie case of unpatentability because the Office Action does not explain why the phrase in question is for an abstract idea with no practical application. MPEP 2106(IV)(D)("After USPTO personnel identify and explain in the record the reasons why a claim is for an abstract idea with no practical application, then the burden shifts to the applicant to either amend the claim or make a showing of why the claim is eligible for patent protection" (emphasis added)).

Nevertheless, in a good faith effort to advance prosecution, applicant has amended claims 1 and 10 to eliminate the "otherwise: do nothing" clause. Applicant respectfully requests that the rejections of independent claims 1 and 10 and their respective dependent claims (i.e., claims 2, 3, 11, and 12) be withdrawn in light of these amendments.

The Office Action rejected claim 4 under 35 USC 101 arguing that the phrase "clustering each string with zero or more clusters associated with low-frequency pairs of high frequency n-grams from that string" (a) is directed to an abstract idea not tied to a technological art, environment or machine that would result in a practical application producing a useful result to form the basis of statutory subject matter, and (b) does not produce a tangible result. Office Action, pgs. 4-5. Applicant contends that the Office Action has not made a prima facie case of unpatentability because the Office Action does not explain why the phrase in question is for an

abstract idea with no practical application. MPEP 2106(IV)(D)("After USPTO personnel identify and explain in the record the reasons why a claim is for an abstract idea with no practical application, then the burden shifts to the applicant to either amend the claim or make a showing of why the claim is eligible for patent protection" (emphasis added)).

Nevertheless, in a good faith effort to advance prosecution, applicant has amended claim 4 (and claim 5). Applicant respectfully requests that the rejections of independent claim 4 and claim 5 (which has been amended to be an independent claim) be withdrawn in light of these amendments.

The Office Action rejected claim 6 under 35 USC 101 arguing that the phrase "clustering the string with a cluster associated with the Y+2 n-gram group" (a) is directed to an abstract idea not tied to a technological art, environment or machine that would result in a practical application producing a useful result to form the basis of statutory subject matter, and (b) does not produce a tangible result. Office Action, pgs. 5-6. Applicant contends that the Office Action has not made a prima facie case of unpatentability because the Office Action does not explain why the phrase in question is for an abstract idea with no practical application. MPEP 2106(IV)(D)("After USPTO personnel identify and explain in the record the reasons why a claim is for an abstract idea with no practical application, then the burden shifts to the applicant to either amend the claim or make a showing of why the claim is eligible for patent protection" (emphasis added)). The Office Action provides no such explanation.

Further, Applicant disagrees with the Office Action's conclusion. The phrase in question is not directed to an abstract idea and it does produce a tangible result. In particular, if a unique n-gram (Ts) in the string is not sufficiently infrequent (claim 6, lines 3-6), and if none of the sets of n-grams (up to sets of Y n-grams) including Ts in the string are sufficiently infrequent (claim

6, lines 7-13), the string is clustered with all unique sets of Y+2 n-gram groups (claim 6, lines 14-17). As explained in the specification, an n-gram is a substring of n characters from the string. So, if the string is "Mike" the 1-grams are "M", "i", "k", and "e", the 2-grams are "Mi", "ik", "ke", and the 3-grams are "Mik" and "ike". If Y=1, a set of Y n-grams is a set of one n-gram. If Y=2, a set of Y n-grams is a set of 2 n-grams, and so on. If Y=2, a Y+2 n-gram group is a group of 4 n-grams. Thus, the phrase in question is not merely directed to an abstract idea and it produces a concrete result when the conditions leading to that claim element are satisfied. Applicant respectfully requests that the rejection of claim 6 and its dependent claims (i.e., claims 7-9) be withdrawn.

In addition, the Office Action rejected claim 6 under 35 USC 101 arguing that the phrase "if the string has not been associated with a cluster with this value of Ts: for every unique set of Y+1 n-grams Tuy in the string T1...R, except S: clustering the string with a cluster associated with the Y=2 n-gram group Ts-Tuy" (note that the Office Action misquotes the claim; it should say "Y+2" instead of "Y=2") do not produce a useful, concrete and tangible result. In particular, the Office Action argues that "this limitation does not produce a result when the string has been associated with a cluster . . . ."

Applicant respectfully disagrees. While Applicant agrees that the limitation in question will not produce a result under certain conditions, it will produce a result under other conditions, such as those described in the preceding paragraph. This is akin to an electronic circuit containing a two-position switch connecting a signal to a first set of circuitry when the switch is in the first position and to a second set of circuitry, and not to the second set of circuitry, when the switch is in the second position. Applicant suggests that a claim to such a circuit would be patentable subject matter under 35 USC 101 in spite of the fact that the first set of circuitry

produces no result when the switch is in the second position. The same should apply here. Applicant respectfully requests that the rejection of claim 6 and its dependent claims (i.e., claims 7-9) be withdrawn.

The Office Action rejected claims 4-5 under 35 USC 103(a) as being unpatentable over Liddy et al., United States Patent No. 6,006,221 (hereinafter "Liddy"). Applicant disagrees. Liddy does not conclude that (a) none of the unique n-grams are low frequency n-grams and that (b) one or more pairs of high frequency n-grams from the string are low frequency pairs and, in response, clustering each string with **one** or more clusters associated with low-frequency pairs of high frequency n-grams from that string, as required by amended claim 4. Further, Liddy does not conclude that (a) none of the unique n-grams are low frequency n-grams and that (b) no pairs of high frequency n-grams from the string are low frequency pairs and, in response, associating that string with clusters associated with triples of n-grams including the pair, as required by amended claim 5. Applicant respectfully requests that the rejections of claims 4 and 5 be withdrawn.

SUMMARY

Applicant contends that the claims are in condition for allowance, which action is requested.

Respectfully submitted,

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